



CONSERVATION DISTRICT USE APPLICATION (CDUA)

All permit applications shall be prepared pursuant to HAR 13-5-31

File No.:

Acceptance Date:

180-Day Expiration Date:

Assigned Planner:

for DLNR Use

PROJECT NAME Ala Mahamoe Traditional Hale

Conservation District Subzone: General

Identified Land Use: P-8 Land and Resource Management (C-1) Installation of a shelter
(Identified Land Uses are found in Hawai'i Administrative Rules (HAR) §13-5-22 through §13-5-25)

Project Address: N/A, Across from 1780 Ala Mahamoe Street

Honolulu HI 96819

Tax Map Key(s): 1-1-12:15

Ahupua'a: Moanalua

County: Honolulu

Proposed Commencement Date: ASAP

Estimated Project Cost: \$0.00

District: Kona

Island: Oahu

Proposed Completion Date: Three months from Commencement Date

RECEIVED
OFFICE OF CONSERVATION
AND COASTAL LANDS
2021 OCT - 5 A 10:38
DEPT. OF LAND &
NATURAL RESOURCES
STATE OF HAWAII

TYPE OF PERMIT SOUGHT

☐

Board Permit

☒

Departmental Permit

ATTACHMENTS

\$ 0 Application Fee. 2.5% of project cost for Board Permits, but no less than \$250, up to a maximum of \$2500; \$250 for Departmental Permits (ref §13-5-32 through 34).

\$ _____ Public Hearing Fee (\$250 plus publication costs; ref §13-5-40)

☒ 20 copies of CDUA (5 hard + 15 hard or digital copies)

☐ Draft / Final Environmental Assessment (EA) or Draft / Final Environmental Impact Statement (EIS) or Statement of Exemption

☒ State Historic Preservation Division HRS 6E Submittal Form
(dlnr.hawaii.gov/shpd/review-compliance/forms)

☐ Management Plan or Comprehensive Management Plan (ref §13-5-39) if required

☐ Special Management Area Determination (ref Hawai'i Revised Statutes 205A)

☐ Shoreline Certification (ref §13-5-31(a)(8)) if land use is subject to coastal hazards.

☐ Kuleana documentation (ref §13-5-31(f)) if applying for a non-conforming kuleana use.

☐ Boundary Determination (ref §13-5-17) if land use lies within 50 feet of a subzone boundary.

REQUIRED SIGNATURES

Applicant

Name: Ryan Peralta
Title; Agency: Forest Management Supervisor I, DLNR/DOFAW
Mailing Address: 2135 Makiki Heights Drive
Honolulu HI 96822
Contact Person & Title: Ryan Peralta
Phone: 808-292-5645
Email: Ryan.K.Peralta@hawaii.gov
Interest in Property: Manager of Forest Reserves

Signature: Ryan K Peralta Date: Sep 28, 2021

Signed by an authorized officer if for a Corporation, Partnership, Agency or Organization

Landowner (if different than the applicant)

Name:
Title; Agency:
Mailing Address:

Phone:
Email:

Signature: _____ Date: _____

For State and public lands, the State of Hawai'i or government entity with management control over the parcel shall sign as landowner.

Agent or Consultant

Agency:
Contact Person & Title:
Mailing Address:

Phone:
Email:

Signature: _____ Date: _____

For DLNR Managed Lands

State of Hawai'i
Chairperson, Board of Land and Natural Resources
State of Hawai'i
Department of Land and Natural Resources
P.O. Box 621
Honolulu, Hawai'i 96809-0621

Signature: DES *GameQ. Case* Date: Oct 2, 2021

PROPOSED USE

Total size/area of proposed use (indicate in acres or sq. ft.): 26' x 31'

Please provide a detailed description of the proposed land use(s) in its entirety. Information should describe what the proposed use is; the need and purpose for the proposed use; the size of the proposed use (provide dimensions and quantities of materials); and how the work for the proposed use will be done (methodology). If there are multiple components to a project, please answer the above for each component. Also include information regarding secondary improvements including, but not limited to, grading and grubbing, placement of accessory equipment, installation of utilities, roads, driveways, fences, landscaping, etc.

Attach any and all associated plans such as a location map, site plan, floor plan, elevations, and landscaping plans drawn to scale (*ref §13-5-31*).

The traditional hale was requested by the kahu and cultural practitioner of Moanalua Valley. It will be used as a shelter for cultural practitioners, students of la'au lapa'au, conservationists working in the area and the public who may be volunteering to work in the area or recreating at Ala Mahamoe. The project at Ala Mahamoe focuses on invasive species control, native forest restoration and traditional and cultural learning and practice. Community groups, schools and volunteers work together. This site is also the center for native Hawaiians of Halau O Huluhena to practice la'au lapa'au as well as train their haumana. Specific species of plants are selected and planted in the project area for la'au lapa'au. The hale will be made in a traditional fashion with mostly natural materials and by a builder who has trained under Master builder Kumu Francis Sinenci. The dimensions of the hale are 25' long x 20' wide x 19' tall. There will be 19 vertical posts. Construction will be done mostly by hand with handtools and wheel barrels. The wood will be sourced from Kapapapuhi fishpond, Pupuhea (privately owned land near Mahuka heiau), and Palehua (privately owned land by the Gill family). The rocks will be sourced from the surrounding area. The fronds will be donated by various landscaping companies that trim the loulu trees (primarily Aloha Arbor care). No heavy equipment/machinery will be used during construction. The area may need minor grubbing to level the ground although the flattest ground was picked for the site. While vegetation clearing for the hale will be minimal, some invasive grasses and koa haole will be cleared from the site. It will be cut by hand into small pieces and staged in piles onsite nearby to naturally break down over time. Past clearing has shown this to be a viable and timely method of dealing with vegetation removal and disposal. There will be no placement of accessory equipment, utilities, roads, driveways or fences. An Archaeological Literature Review and a field Inspection was conducted by Honua Consultants. A determination of no historic properties being affected was made.

Native and polynesian introduced plants are being planted around the hale and in the surrounding area for watershed enhancement, native forest restoration and the practice of la'au lapa'au. With clearing some native la'au plants have shown to emerge from the seedbank, uhaloa and popolo. Other plants to be planted include but are not limited to: A'ali'i, Wiliwili, Lonomea, Milo, Kou, Ti, Ipu, Ilima, Ma'o, Hala, Iliahi, Koa, Lama, Loulu, Pili, Ko'oko'olau, Ulei, Ilie'e. Planting season is during the rainy winter lonoikamakahiki season. Plants will be planted in the ground using hand tools. There are currently 3 water catchments onsite. Plants are cared for by Halau Huluhena, Ko'olau Mountains Watershed Partnership, and community volunteers. Maintenance is regularly scheduled throughout the year.

Application fee of \$0. is being requested due the fact that DOFAW is an agency within DLNR and this

project is in alignment with our mission: The mission of DLNR's Division of Forestry and Wildlife is to responsibly manage and protect watersheds, native ecosystems, and cultural resources and provide outdoor recreation and sustainable forest products opportunities, while facilitating partnerships, community involvement and education. The traditional hale is part of a larger project with multiple facets that incorporate invasive species control, native forest restoration, cultural resource enhancement, outdoor recreation, sustainable forest products, partnership, community involvement and education.

The proposed traditional hale project is exempted from HRS 343 via DLNR Exemption list dated 11-20 under:

General Exemption Type 3 Construction and location of single new, small facilities or structures and the alteration and modification of the facilities or structures and installation of new, small, equipment and facilities and the alteration and modification of the equipment or facilities...

Part 2: 3. Construction and location of new, small facilities or structures necessary to support or enhance public recreational use of lands and waters, such as comfort stations and related individual wastewater disposal systems, sanitation facilities, pavilions, shelters, cabins, campgrounds, and other similar structures.

EXISTING CONDITIONS

Please describe the following, and attach maps, site plans, topo maps, colored photos, and biological or archaeological surveys as appropriate:

Existing access to site:

Site is located adjacent to a paved C&C BWS access road off of Ala Mahamoe Street. Closest street address to this access road is 1816 Ala Mahamoe Street. Ala Mahamoe Street is a public road and accessible to everyone.

Existing buildings/structures:

The project area itself is undeveloped but was graded in the past for a nearby BWS water tank access road. The access road is paved and approximately 40 feet from the project area. The BWS water tank is approximately 1,100 feet from the project area. Nearby infrastructure includes a warning siren along the bend in the roadway approximately 15 m to northwest of the project area.

Existing utilities (electrical, communication, gas, drainage, water & wastewater):

Subsurface utilities are likely present under or paralleling the roadway that lead to the warning siren and upslope to the water tank facility. This project is sufficiently far away from the roadway and will not impact those utilities.

Furthermore, this project does not require the use of or the installation of any utilities.

Physiography (geology, topography, & soils):

Moanalua Ahupua'a is on the southern side of O'ahu and is the western-most ahupua'a (traditional land division) of the Kona District. Moanalua is bordered by Hālawā Ahupua'a in 'Ewa District and Kahauiki Ahupua'a to the south. Moanalua Ahupua'a runs from the southern coast of O'ahu to the crest of the Ko'olau Mountain Range, encompassing two large valleys, Kamananui ("the large branch") and Kamanaiiki ("small branch"), as well as two volcanic tuff cones, Āliamanu ("bird salt pond") and Āliapa'akai ("salt pond") (Pukui et al. 1974). This part of O'ahu is dominated by northeastern trade winds and receives less than 30 inches (76 centimeters [cm]) of rain annually in lower elevations and between 30-50 inches (76-127 cm) in higher elevations, particularly during the rainy season between November and March (Armstrong 1983).

The project area is located on the end of a finger ridge situated between Kalou Stream and Manaiki Stream, at an elevation of approximately 250 feet (ft.) (76 m.) above mean sea level. The project area is located at the transition of the lowlands to the uplands of Moanalua and is near to the eastern boundary with Kahauiki Ahupua'a. The lowlands of Moanalua were formed by late Pleistocene coral reef overlain with calcareous beach sands and/or terrigenous sediments. Traditionally, the lowlands of Moanalua were a shallow reef environment protected by a coastal sand dune. The coastal shallows were filled-in during the mid-twentieth century using dredged marine materials.

The land within the project area is classified as rock land (rRK) and is made up of areas where exposed rock covers 25 to 90 percent of the surface (Foote et al. 1972) (Figure 5). Rock lands are identified by basalt and andesite rock outcrops and very shallow soils. On O'ahu the soil material is very sticky and very plastic and has high shrink-swell potential. They are generally used for pasture, wildlife habitat, urban development, and water supply. The natural vegetation in the lower elevations consist mainly of kiawe (*Prosopis pallida*), klu (*Acacia farnesiana*), piligrass (*Heteropogon contortus*), Japanese tea

(*Camellia sinensis*), and koa haole (*Leucaena leucocephala*) while the higher elevations consist of lantana (*Lantana camara*), guava (*Psidium guajava*), Natal redtop (*Melinis repens*), and molassesgrass (*Melinis minutiflora*) (Foote et al. 1972:119).

See Honua report.

Hydrology (surface water, groundwater, coastal waters, & wetlands):

No surface waters, coastal waters or wetlands in the project area. The project area sits on a ridge between two streams; Kalou to the north and Manaiki to the south. The distance from the streams are approximately 240 feet and 2000 feet respectively. It is above the Moanalua Aquifer.

Flora & fauna (indicate if rare or endangered plants and/or animals are present):

The natural area is 100% non-native. Haole koa, guinea grass, kiawe and autograph trees dominate the area. Due to the state of the environment, native fauna is also non-existent. Non-native geckos, insects, mongoose, rats and birds (i.e. doves, pigeons and mynah birds) also dominate. The only native species are the plants that were planted by DOFAW and its contractors. The native species that were planted include A'ali'i, Wiliwili, Lonomea, Milo, Kou, Ti, Ipu, Ilima, Ma'o, Hala, Iliahi, Koa, Lama, Loulu, Pili, Ko'oko'olau, Ulei, Ilie'e. No rare or endangered plants and/or animals are present.

Natural hazards (erosion, flooding, tsunami, seismic, etc.):

Erosion - Some erosion may occur if there is mass clearing with no erosion mitigation follow-up. However, as all clearing is done for the purpose of planting natives, erosion mitigation is installed immediately after the clearing. the erosion mitigation is in the form of replanting with vegetation, mulch from cutting weeds or weed mat.

Wildfire - Wildfires may pose a threat to this dry area. However, the planting of native species to replace guinea grass is an effort to mitigate for the wildfire hazard. The native plants are not light and flashy fuels and should not carry fire as efficiently as the non-native grasses.

Flooding - The hale sits on a hill and is over 240 feet from a stream. It is not in a flood plain. No threat from flooding.

Tsunami - The project area is at 400 feet elevation. No threat from tsunamis.

Seismic hazards - Historically, seismic activity for O'ahu is relatively infrequent. While no structure can withstand extreme seismic activity, the risk factor of seismic threats to this project is low.

Historic & cultural resources:

The survey of the project area indicates it was graded for construction of the water tank access road, likely between 1958 and 1959 based on the historic maps and aerial photographs of the area. The evidence of grading in the project area consisted of mechanically crushed basalt cobble to pebble sized basalt fragments deposited while contouring the slope and building the adjacent roadway. Nothing of archaeological or cultural note was observed or collected from the project area. See Honua report.

EVALUATION CRITERIA

The Department or Board will evaluate the merits of a proposed land use based upon the following eight criteria (*ref §13-5-30(c)*)

1. The purpose of the Conservation District is to conserve, protect, and preserve the important natural and cultural resources of the State through appropriate management and use to promote their long-term sustainability and the public health, safety, and welfare. (*ref §13-5-1*) How is the proposed land use consistent with the purpose of the conservation district?

Cultural practitioners are very concerned about the conservation, protection and preservation of Hawai'i's natural and cultural resources. There is a direct connection between native Hawaiian traditional and cultural practices and the natural world from both a spiritual and practical sense. La'au lapa'au utilize native plants so the planting and sustaining of native forest plants are part of their practice. The protocol of oli's and pule's and asking for permission from the spirits and ancestors before the entering the forest and the taking of plants demonstrates a spiritual connection. The traditional hale will help to perpetuate the T&C practices by serving as a piko for their in field schooling and restoration work in the area.

2. How is the proposed use consistent with the objectives of the subzone of the land on which the land use will occur? (*ref §13-5-11 through §13-5-15*)

HAR §13-5-14 (2) Defines the General (G) subzone as "Lands suitable for farming, flower gardening, operation of nurseries or orchards, grazing; including facilities accessory to these uses when the facilities are compatible with the natural physical environment." As such, a 25' x 20' traditional hale to provide shelter for cultural practitioners, students of la'au lapa'au, conservationists and members of the public is a suitable land use. Additionally, it has a much lower environmental impact than farming, nurseries, orchards, grazing and accessory facilities.

3. Describe how the proposed land use complies with the provisions and guidelines contained in chapter 205A, HRS, entitled "Coastal Zone Management" (*see 205A objectives on p. 9*).

Recreational Resources: The proposed project sits in the Honolulu Forest Reserve and will not affect public recreation opportunities. The Forest Reserve is open to the public seven days a week during daylight hours. The public is welcome to partake in appropriate recreational activities such as relaxing, hiking, botanizing and bird watching. When completed, the hale will be open to the public and provide a place to shelter from wind, rain and intense sun. It will in fact, enhance public recreation.

Historic Resources: An Archaeological LRFI was conducted in the project area. No historic resources were identified and SHPD concurs that this project will have no effect on historic properties via letter dated August 24, 2021. Therefore this project does not conflict with the historic resource resources objectives in Ch 205A.

Scenic and Open Space Resources: The project sits on a bench cut on a ridge line in a haole koa forest and will involve the clearing of vegetation and the installation of a manmade structure in a natural environment. However, the entire scope of the project will improve the overall scenic beauty of the area by 1) removing shrubby/shorter non-native trees, 2) replacing them with native larger stature trees such as kou, milo and wiliwili, 3) the larger native trees will hide the unsightly road cut through the mountain side and the hale and 4) the hale will be made of natural materials and will blend in with the environment.

Coastal Ecosystems: This is not a shoreline project.

Economic Uses: This project connects people to traditional and cultural practices and our ancestral philosophies and strategies for land management. These strategies such as the kapu system were much more sustainable in regard to managing natural resources. As such, while the project will not be an economic booster, it will teach people to wisely cultivate and use the natural resources we have. Using locally sourced natural resources benefits Hawaii more than purchasing out of State resources.

Coastal Hazards: This is not a shoreline project.

Managing Development: This CDUA will be posted online via the OCCL website. Koolau Mountains Watershed Partnership and Halau O Huluena will talk to the neighboring community about this project. Additionally, a presentation will be made at the Neighborhood Board meeting.

Public Participation: The community is constantly encouraged to take a part in this project through volunteer opportunities. Community work days involve but are not limited to weeding, planting native plants, rubbish removal and laying down weed mat. Work days are scheduled in advance and have been ongoing for several years.

Beach Protection: This is not a shoreline project.

Marine Resources: This is not a shoreline project.

4. Describe how the proposed land use will not cause substantial adverse impact to existing natural resources within the surrounding area, community or region.

The size of the hale has a tiny foot print and will have minimal impact on the area. No heavy machinery or equipment will be used. Construction will be done primarily by hand. Current management activities in the area include the removal of invasive species and the planting of native species.

5. Describe how the proposed land use, including buildings, structures and facilities, is compatible with the locality and surrounding areas, appropriate to the physical conditions and capabilities of the specific parcel or parcels.

The traditional hale will be made of natural materials such as loulu leaf fronds, mangrove, iron wood and stones will be used. As such, it will fit nicely in the natural environment. Additionally, trees will be planted to surround the hale to help it blend into the area. Planting stock will be sourced from the DOFAW Makiki Nursery or the KMWP nursery.

6. Describe how the existing physical and environmental aspects of the land, such as natural beauty and open space characteristics, will be preserved or improved upon.

The traditional hale will be made of natural materials such as loulu leaf fronds, mangrove, iron wood and stones. As such, it will fit nicely in the natural environment. Additionally, trees will be planted to surround the hale to help it blend into the area. Planting stock will be sourced from the DOFAW Makiki Nursery or the KMWP nursery.

7. If applicable, describe how subdivision of land will not be utilized to increase the intensity of land uses in the Conservation District.

N/A, No subdivision of land is being proposed.

8. Describe how the proposed land use will not be materially detrimental to the public health, safety and welfare.

The traditional hale will be used regularly and regularly inspected for sturdiness. If the structure needs repair, it can be easily done as it is a simple structure. Replacement materials for repairs can be sourced locally. Furthermore, the natural construction materials make it easy to dismantle and dispose of should the need arise.

CULTURAL IMPACTS

Articles IX and XII of the State Constitution, other state laws, and the courts of the State, require government agencies to promote and preserve cultural beliefs, practices, and resources of Native Hawaiians and other ethnic groups.

Please provide the identity and scope of cultural, historical, and natural resources in which traditional and customary native Hawaiian rights are exercised in the area.

The kahu of Moanalua, Roddy Akau, uses the area for la'au lapa'au. He gathers plants from this area for his practice. He also brings his students here to teach them about la'au lapa'au. Part of the class is to plant native plants and remove invasive species for their practices.

Identify the extent to which those resources, including traditional and customary Native Hawaiian rights, will be affected or impaired by the proposed action.

No negative impact to traditional and customary Native Hawaiian rights. The hale is being requested by the kahu of the area.

What feasible action, if any, could be taken by the Board of Land and Natural Resources in regards to your application to reasonably protect Native Hawai'i rights?

The best action taken by the BLNR to protect Native Hawaiian rights is to approve this submittal.

OTHER IMPACTS

Does the proposed land use have an effect (positive/negative) on public access to and along the shoreline or along any public trail?

The proposed land use will have a positive effect on public access and their recreational experience. Currently, public access already exists and the public is allowed to enter the Forest Reserve any time during day light hours. Activities such as hiking, bird watching and botanizing may be done without special permits. The addition of the traditional hale will enhance the recreational experience by providing a cool and relaxing place to rest. It will also provide shelter from extreme heat and the rain.

Does the proposed use have an effect (positive/negative) on beach processes?

No effect. This is not a shoreline project.

Will the proposed use cause increased sedimentation?

No increased sedimentation. The footprint of the project is very small. As such, large clearing and soil exposure/vulnerability will be minimal during construction. Additionally, the completed shelter will have a floor that is armored with stone. Therefore, there will be no exposed soil after construction. Finally, the planting of native plants around the project area will provide additional soil stabilization. Multiple strata of plants is planned. This includes ground cover such as 'ilie'e, medium stature trees such as 'a'ali'i and taller trees such as kou and milo. The multiple strata breaks up rain drops as they fall. The smaller raindrops do not impact the ground as heavily and are more readily absorbed into the soil. This process improves aquifer recharge and avoids rain water sheet flow and erosion. Weed mat is also used during the restoration project. While its primary function is to inhibit weed growth to facilitate successful maturity of outplantings, it also prevents the rain from directly impacting bare soil. Thereby preventing erosion and sedimentation.

Will the proposed use cause any visual impact on any individual or community?

No. The hale is set back on a bench cut on the hill and has limited visibility from the street. Multiple strata native plants have and will be planted to surround the hale. The plants will serve as a visual barrier between the hale and the street. The use of natural materials for the posts and roofing, such as palm fronds will further camouflage the hale and it will blend in nicely in the natural environment.

Please describe any sustainable design elements that will be incorporated into the proposed land use (e.g. the use of efficient ventilation and cooling systems; renewable energy generation; sustainable building materials; permeable paving materials; efficient energy and water systems; efficient waste management systems; etc.).

Construction materials will be renewable natural materials such as wood and palm fronds. All materials will be sourced locally. In the event that materials need to be replaced, they can still be sourced locally. All of the materials can be harvested sustainably such as recycling trees that were cut down from tree removal projects and collecting palm fronds that fall during natural senescence. The hale is an open air structure that utilizes wind flow to keep the occupants cool. No utilities are required for this structure so there will be no consumption of electricity or water.

If the project involves landscaping, please describe how the landscaping is appropriate to the

Conservation District (e.g. use of indigenous and endemic species; xeriscaping in dry areas; minimizing ground disturbance; maintenance or restoration of the canopy; removal of invasive species; habitat preservation and restoration; etc.)

The project will include the removal of invasive species for the purpose of replacing them with native species or polynesian introduced species. Plant species are carefully selected to ensure that they are a good fit for this site to maximize plant survivability. This activity is very appropriate for Conservation Districts. The collection of material for la'au lapa'au will be measured and sustainable so as not to over harvest. As such, the natural environment can only benefit with this project.

Please describe Best Management Practices that will be used during construction and implementation of the proposed land use.

No heavy equipment or machinery will be used, only hand tools.

The scope of the project is small so there will be no large scale ground disturbance.

Landscaping will be done with native plants or polynesian introduced plants that are appropriate to this area. Invasive species will not be used for landscaping. Plants are third party inspected before planting to prevent the introduction of harmful forest agents such as pathogens, weeds, insects and other invertebrates.

No herbicides or pesticides will be used for the sake of the la'au lapa'au practices in the area.

Please describe the measures that will be taken to mitigate the proposed land use's environmental and cultural impacts.

No negative environmental impacts are anticipated, only positive impacts from the restoration of a native ecosystem.

Weeds - Only native or polynesian introduced plants will be selected for planting.

Fire - No heavy equipment or motorized equipment will be used for the construction of the hale. Open fires are not required for the construction project.

Erosion - Exposed bare soil will be stabilized with plantings, weed mat or will be armored with small stones for the hale floor.

Chemicals - No motorized equipment, pesticides, paint, chemical cleaners, etc. will be used for this project.

Harmful Forest agents -

Rapid Ohia Death: No natural populations of 'ohi'a are in this area. However, visitors to the project area are advised to clean the mud off their boots and spray them with 70% alcohol to sanitize them before entering the area.

Naio thrip: Naio is no longer being planted here. The few naio that were planted here were removed when it was discovered that they were infested with naio thrip.

Lobate lac scale: All plants are inspected before being outplanted on the site. No lobate lac scale is detected at the Makiki Nursery, which is third party inspected regularly to check for pathogens, insects and other harmful agents.

Wiliwili gall wasp: All plants are inspected before being outplanted on the site. No wiliwili gall wasps are detected at the Makiki Nursery, which is third party inspected regularly to check for pathogens, insects and other harmful agents.

Ungulates: No ungulates are being introduced to the project site.

Human encroachment - While the traditional hale is technically an encroachment of a man made structure in a natural environment, the small foot print of the hale is negated by the entirety of the rest of the project's positive impacts (i.e. weed removal and native forest restoration).

No negative cultural impacts anticipated, only the positive impacts of the preservation and sustainment of our host Native Hawaiian Culture.

SINGLE FAMILY RESIDENTIAL STANDARDS

Single Family Residences must comply with the standards outlined in HAR Chapter 13-5, Exhibit 4. Please provide preliminary architectural renderings (e.g. building foot print, exterior plan view, elevation drawings; floor plan, etc.) drawn to scale.

SIZE OF LOT

	Existing	Proposed	Total
Proposed building footprint	0	0	0
Paved areas/ impermeable surfaces	0	0	0
Landscaped areas	0	0	0
Unimproved areas	0	0	0

SETBACKS Front: 0 Side: 0 Back: 0

SHORELINE PROPERTIES

Average Lot Depth (ALD): N/A Average annual coastal erosion rate: N/A

Minimum shoreline setback based on Exhibit 4: N/A

Actual shoreline setback or proposed structure: N/A

MAXIMUM DEVELOPABLE AREA

The Maximum Developable Area includes all floor areas under roof, including first, second, and third stories, decks, pools, saunas, garage or carport, and other above ground structures.

Maximum Developable Area based on Exhibit 4: 0

Actual Developable Area of proposed residence:

Actual height of the proposed building envelope as defined in Exhibit 4: 0

COMPATIBILITY

Provide justification for any propose deviation from the established residential standards.

N/A

How is the design of the residence compatible with the surrounding area?

N/A

If grading is proposed, include a grading plan which provides the amount of cut and fill. Has grading or contouring been kept to a minimum?

N/A

CHAPTER 205A – COASTAL ZONE MANAGEMENT

Land uses are required to comply with the provisions and guidelines contained in Chapter 205A, Hawai'i Revised Statutes (HRS), entitled "Coastal Zone Management," as described below:

- **Recreational resources:** Provide coastal recreational opportunities accessible to the public.
- **Historic resources:** Protect, preserve, and, where desirable, restore those natural and manmade historic and prehistoric resources in the coastal zone management area that are significant in Hawaiian and American history and culture.
- **Scenic and open space resources:** Protect, preserve, and, where desirable, restore or improve the quality of coastal scenic and open space resources.
- **Coastal ecosystems:** Protect valuable coastal ecosystems, including reefs, from disruption and minimize adverse impacts on all coastal ecosystems.
- **Economic uses:** Provide public or private facilities and improvements important to the State's economy in suitable locations.
- **Coastal hazards:** Reduce hazard to life and property from tsunami, storm waves, stream flooding, erosion, subsidence, and pollution.
- **Managing development:** Improve the development review process, communication, and public participation in the management of coastal resources and hazards.
- **Public participation:** Stimulate public awareness, education, and participation in coastal management.
- **Beach protection:** Protect beaches for public use and recreation.
- **Marine resources:** Promote the protection, use, and development of marine and coastal resources to assure their sustainability.

CERTIFICATION

I hereby certify that I have read this completed application and that, to the best of my knowledge, the information in this application and all attachments and exhibits is complete and correct. I understand that the failure to provide any requested information or misstatements submitted in support of the application shall be grounds for either refusing to accept this application, for denying the permit, or for suspending or revoking a permit issued on the basis of such misrepresentations, or for seeking of such further relief as may seem proper to the Land Board.

I hereby authorize representatives of the Department of Land and Natural Resources to conduct site inspections on my property. Unless arranged otherwise, these site inspections shall take place between the hours of 8:00 a.m. and 4:30 p.m.

Signature of authorized agent(s) or if no agent, signature of applicant

AUTHORIZATION OF AGENT

I hereby authorize _____ to act as my representative and to bind me in all matters concerning this application.

Signature of applicant(s)

DAVID Y. IGE
GOVERNOR OF
HAWAII



**STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES**

STATE HISTORIC PRESERVATION DIVISION
KAKUHIHEWA BUILDING
601 KAMOKILA BLVD., STE 555
KAPOLEI, HI 96707

SUZANNE D. CASE
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

ROBERT K. MASUDA
FIRST DEPUTY

M. KALEO MANUEL
DEPUTY DIRECTOR - WATER

AQUATIC RESOURCES
BOATING AND OCEAN RECREATION
BUREAU OF CONVEYANCES
COMMISSION ON WATER RESOURCE MANAGEMENT
CONSERVATION AND COASTAL LANDS
CONSERVATION AND RESOURCES ENFORCEMENT
ENGINEERING
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

August 24, 2021

Ryan K. Peralta, Forest Management Supervisor
Division of Forestry and Wildlife – Oahu Branch
Department of Land and Natural Resources
2135 Makiki Heights Drive
Honolulu, HI 96822
Email: ryan.k.peralta@hawaii.gov

IN REPLY REFER TO:
Project No.: 2021PR00731
Doc No.: 2108GC12
Archaeology

Dear Ryan Peralta:

**SUBJECT: Chapter 6E-8 Historic Preservation Review
Construction of Outdoor Traditional Hale – Ala Mahamoe Cultural and Education Forest
Request for Concurrence with Project Effect Determination
Moanalua Ahupua‘a, Kona District, Island of O‘ahu
TMK: (1) 1-1-012:015 por.**

This letter provides the State Historic Preservation Division's (SHPD's) comments on the State of Hawai'i, Department of Land and Natural Resources (DLNR), Division of Forestry and Wildlife's (DOFAW's) proposed Construction of Outdoor Traditional Hale Project and request for SHPD's concurrence with a project effect determination of "no historic properties affected." The SHPD received this submittal on June 24, 2021, which included the following:

- [X] DOFAW letter dated June 24, 2021, initiating consultation with SHPD and requesting concurrence with project effect determination;
- [X] SHPD HRS 6E Submittal Form and Site Plan;
- [X] Letters from community members Isiah Burch and Roddy Akau; and
- [X] Supporting document titled *Archaeological Literature Review and Field Inspection for the Halau O Hulenua Kio'o Hale Project, Moanalua Ahupua'a, Kona (Honolulu) District, O'ahu Island, TMK: (1) 1-1-012:015 por.* (DiVito et al, April 2021).

Project Description:

The DOFAW's mission is to manage and protect watersheds, native ecosystems, and cultural resources and provide outdoor recreation and sustainable forest products opportunities, while facilitating partnerships, community involvement and education. DOFAW has been working on a Cultural and Education forest in the Moanalua Section of the Honolulu Watershed Forest Reserve, to include restoration of native forest, education opportunities for keiki and community on land and water stewardship and provide a place for traditional Hawaiian practitioners to continue their cultural practices and a place to train *haumāna* (students). In collaboration with Halau O Huluhenua, the Ko'olau Mountains Watershed Partnership (KMWP), DOFAW proposes to construct a traditional hale which will serve as a multi-generational classroom providing cultural and educational programs.

The proposed project involves the construction of 20' wide x 25' long x 19' ft high traditional hale. Nineteen post-holes will be excavated to 18 in. deep, and excavation for grading will extend to 15 in. below current ground surface. Vegetation clearing will be limited to non-native invasive species such as guinea grass and haole *koa*.

DiVito et al. (2021) indicate that no previous archaeological studies have been conducted within the project area and no historic properties have been identified. The geographical location of the area has remained undeveloped and ungraded since 1842 to between 1941 and 1961 when the area containing the current parcel was subdivided. Between 1952 and 1959 an access road was constructed upslope to provide access to a Board of Water Supply (BWS) water tank. Since that time, the project area has remained essentially unchanged.

DiVito et al. (2021) assert that several archaeological studies have been conducted in the vicinity of the project area, mostly in support of construction and development projects associated with the Tripler Army Medical Center, the Red Hill Fuel Storage Area, park development, infrastructure improvements, and a few residential and low-rise housing developments. The types of sites that have been documented in the vicinity include rock shelters, an agricultural complex and agricultural terraces, the location of former heiau and several traditional places of interest, and a WW II-era bunker. The traditional Hawaiian sites are mainly near the resources of Salt Lake and Āliamanu Crater and prominent places along the ridges of the uplands.

Fieldwork was conducted on February 11, 2021, consisting of 100% pedestrian survey at approximately 1-meter intervals. The project area is located at the toe of a rocky finger of land truncated by Ala Mahamoe Street to the south. An access road with multiple switchbacks begins at Ala Mahamoe Street and runs up the finger of land to the BWS water tank. Signs of previous grading and push piles and secondary deposited soil and rock piles have been observed outside of the project area. No historic properties were observed during the field inspection. DiVito et al. (2021) recommended a project effect determination of “no historic properties affected.”

Findings:

A SHPD records review indicates that the 53-acre parcel identified as TMK: (1) 1-1-012:015 is owned by DOFAW. Several archaeological studies have been conducted within various portions of Moanalua Valley (McCallister 1933; Soehren 1964; Ayers 1971; Ayers 1979; Rosendahl 1977; Davis and Kaschko 1980; Tulchin et al. 2009; Matsushima et al. 2014, and Thao et al. 2018). The studies documented numerous archaeological sites including agricultural terraces, rock carvings; heiau, burial caves, historic houses, historic carriage roads, and plantation-era trails within the lower and upper Moanalua Valley. Additionally, in a SHPD letter dated January 26, 2018 (Log No. 2017.02338, Doc No. 1801GC14), the SHPD requested an opportunity to review any project involving ground disturbing activities for the DOFAW’s proposed Education Shelter in Moanalua Valley Education Forest.

The **SHPD concurs** with the DOFAW’s project effect determination of “no historic properties affected” for the current project. Pursuant to HAR §13-275-7(e), when the SHPD comments that the action shall not affect any significant historic properties, the historic preservation review ends. The HRS 6E historic preservation review process is ended for the subject project. The permit issuance process may proceed.

The document titled *Archaeological Literature Review and Field Inspection for the Halau O Hulena Kio’o Hale Project, Moanalua Ahupua’a, Kona (Honolulu) District, O’ahu Island, TMK: (1) 1-1-012:015 por.* (DiVito et al, April 2021) serves to facilitate project planning and supports the historic preservation review process. Please send one hard copy of the document clearly marked FINAL, along with a copy of this review letter and a text-searchable PDF version of the report to the Kapolei SHPD office, attention SHPD Library. Additionally, upload a text-searchable copy of the report to HICRIS Project No. 2021PR731 using the project supplemental option and send a text-searchable copy of the report to Lehua.K.Soaes@hawaii.gov.

The **SHPD hereby notifies** the DOFAW that the HRS 6E historic preservation review process is ended. Project initiation may proceed.

Please attach to permit: In the unlikely event that subsurface historic resources, including human skeletal remains, structural remains, cultural deposits, artifacts, sand deposits, or sink holes are identified during the demolition and/or construction work, cease work in the immediate vicinity of the find, protect the find from additional disturbance, and contact the State Historic Preservation Division, at (808) 692-8015.

Ryan Peralta
August 24, 2021
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Please contact Susan A. Lebo, Archaeology Branch Chief, at Susan.A.Lebo@hawaii.gov for any questions or concerns regarding this letter.

Mahalo,

Alan Downer

Alan S. Downer, PhD
Administrator, State Historic Preservation Division
Deputy State Historic Preservation Officer

Ala Mahamoe Restoration Planning 2020 - 2025



Ala Mahamoe Cultural Forest Strategic Plan

WHO

KMWP, DOFAW, Sierra Club, Community at large, Cultural Community, Youth in schools

WHAT

This management plan was created with the purpose to guide staff and partners of KMWP to create a successful restoration zone and meet grant deliverables in an efficient, planned strategy. Due to the long-term commitment to Ala Mahamoe, KMWP will plan stages to complete the objectives listed below.

GOAL

- Objective 1: Control invasive species to improve ecological integrity and watershed services
- Objective 2: Provide opportunities for students and community members to be involved in forest stewardship and conservation work through a green infrastructure project.
- Objective 3: Establish a Hawaiian Cultural Garden.
- Objective 4: Expand foot print for plant maintenance, growth, and education opportunities

WHEN

KMWP staff began site work in January, 2018, with a general orientation of the area and ground vegetation inventory. The site is dominated by non-native koa haole (*Leucaena leucocephala*) and Guinea grass (*Megathursus maximus*). Remnant native uhaloa (*Waltheria indica*) and ulei (*Osteomeles anthyllidifolia*) are found in relatively low numbers.

WHERE

- Site Location: Approximately 1812 Ala Mahamoe Street
- Translation: Literal - the smooth path
- Moku: Kona
- Ahupua'a: Moanalua
- Details: Between Kamanau and Kamanaiiki

Reforestation Process

In taking into consideration plants use by cultural practitioners for native Hawaiian la'au lapa'au healing practices, it was decided that manual control methods would be employed to avoid the use of chemical herbicide in the medicinal garden.

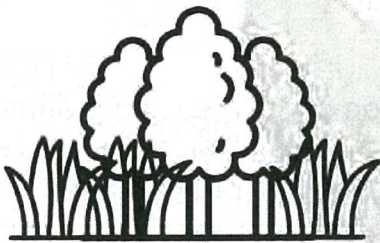
1. TARGET SPECIES

- Guinea Grass
- Koa Haole
- Keawe

2. RESTORATION STRATEGIES

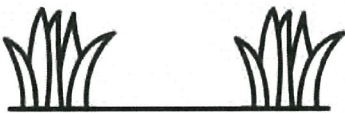
- Manually cut target species with weed whackers, whip and blade
- Cut stump for trees
- No herbicide will be used with the restoration area of Ala Mahamoe currently proposed
 - Future expansions and areas further mauka will be discussed in the future with Roddy and Gabe regarding the use of herbicide
- Weed mat and kipuka zones established (kipuka: a hole or an oasis of plants)
- Gorilla planting in fallow uncleared lands
- Mulch and plant kipuka zones

Tentative Timeline:



YEAR 0-1: Establishing Kipuka Zone

- Invasive grasses and trees dominate
- Strategically select new zones to clear
- Use non-chemical clearing methods



YEAR 0-2: Establishing Kipuka Zone

- Install weed mat to suppress grasses from regrowth
- Maintain kipuka areas until planting can happen
- Weed mat lifespan: 6 - 10 years



YEAR 2-5: Planting Kipuka Zone

- During wet season, use volunteers to install select plants
- Mulch and water as needed, especially in hot seasons
- Maintain areas with planted kipukas and weed grasses that regrow



YEAR 5-10: Kipuka Zone Native Forest Canopy Established

- Once native trees mature and create a canopy cover, weedmat can be removed
- Continue to monitor for change and water
- Begin to plan for understory planting

DOFAW Plant List 2020-2025

Acronym	Scientific Name	Common/Hawaiian Name	Quantity Request	Collect Seed	Zone
Abu men	Abutilon menziesii	Kooloaula	25	Yes	
Aca koaia	Acacia koaia	Dwarf koa	75	n/a	
Ach spl	Achyranthes splendens	ewa hinahina	100	n/a	
Arg gla	Argemone glauca	puakala	30	n/a	
Cal ino	Calophyllum inophyllum	kamani	50	n/a	
Cap san	Capparis sandwichiana	maiapilo	100	n/a	
Che oah	Chenopodium oahuense	aweoweo	400	n/a	
Chy hal	Chrysodracon halapep	halapepe	20	n/a	
Col asi	Colubrina asiatica	anapanapa	100	n/a	
Col opp	Colubrina oppositifolia	anapanapa (tree form)	10	(LCC)	
Cor sub	Cordia subcordata	kou	100	yes	
Dod vis	Dodonaea viscosa	aalii	250	n/a	
Ery san	Erythrina sandwicensis	wiliwili	200	yes	
Gar bri	Gardenia brighamii	na'u	5	n/a	
Gos tom	Gossypium tomentosum	ma'o	100	n/a	
Het con	Heteropogon contortus	pili grass	100	n/a	
Hib bra	Hibiscus brackenridgei	ma'o hau hele	25	n/a	
Hib kok	Hibiscus kokio	kokio	25	n/a	
Ipo pes	Ipomoea pes_caprae	pohuehue	35	n/a	
Myo san	Myoporum sandwicense	naio (thrip resistant)	200	n/a	
Not san	Nototrichium sandwicense	kului	200	n/a	
Ost ant	Osteomeles anthyllidifolia	Ulei	100	yes	
Ple par	Plectranthus parviflorus	alaalawainui	50	n/a	
Plu zey	Plumbago zeylanica	iliee	500	n/a	
Pri rem	Pritchardia remota	loulu	75	n/a	
Rau san	Rauvolfia sandwicensis	hao	20	n/a	
San ell	Santalum ellipticum	iliahi	50	n/a	
Sap oah	Sapindus oahuensis	lonomea	100	n/a	
Sca tac	Scaevla taccaada	naupaka	50	n/a	
Ses tom	Sesbania tomentosa	ohai	20	n/a	
Sida fal	Sida falax (papa form)	llima papa	200	n/a	
The pop	Thespesia populnea	milo	200	n/a	
Vig rot	Vitex rotundifolia	pohinahina	50	n/a	

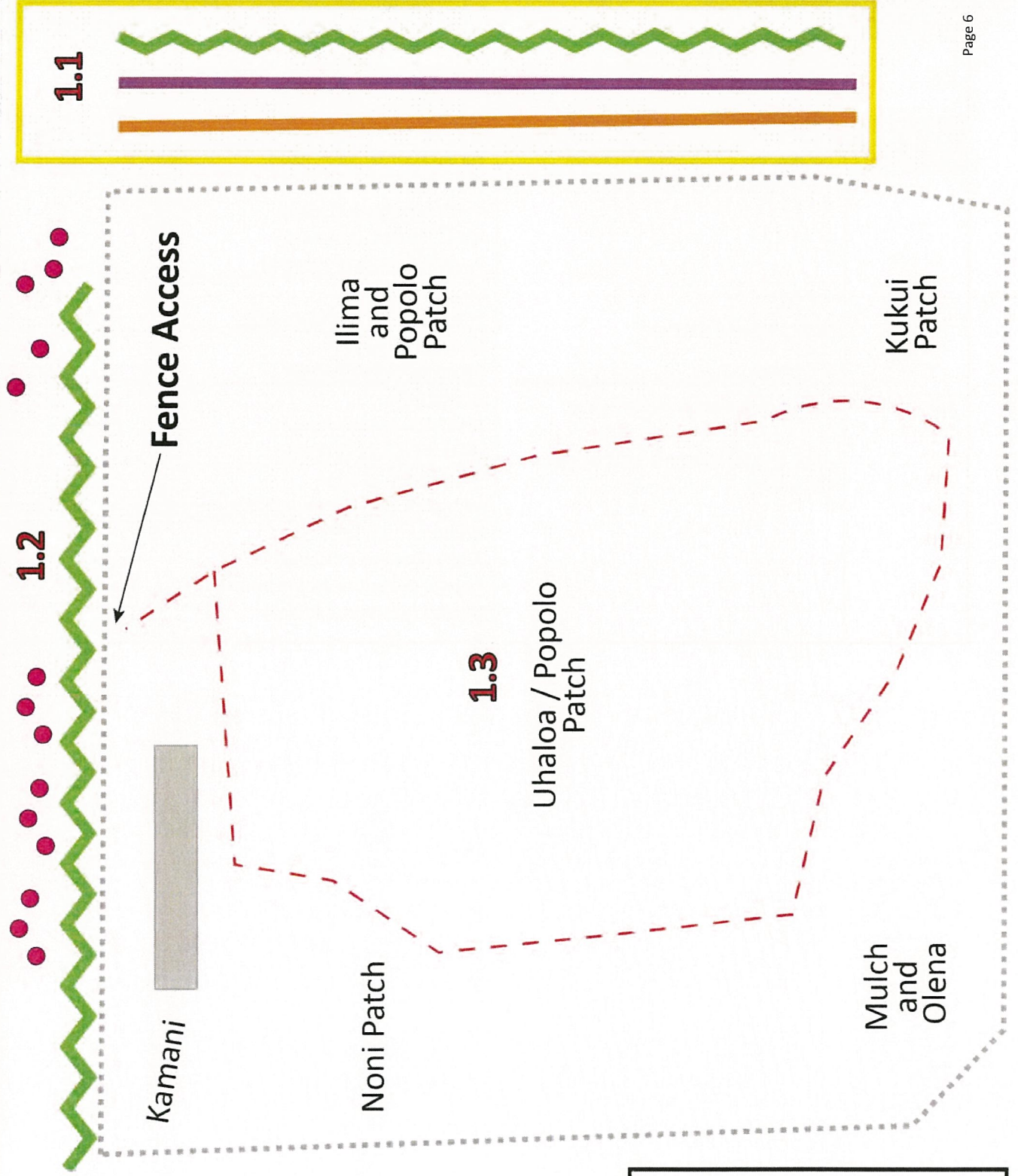
Ala Mahamoe Zone Overview



Zone 1 of Ala Mahamoe Cultural Forest

Access Gate

BWS Access Road



Legend

- Access Trails
- Kipuka Zone
- Fenced Garden
- Ground cover
- Naupaka
- Hala
- Ti Leaf
- Aalii

Zone 1 of Ala Mahamoe Cultural Forest: La'au Lapa'au Garden

Kipuka Zones	Name	Species Composition
1.1	Ala Mahamoe Entrance	Ti Leaf (<i>Cordyline frtcosa</i>) Hala (<i>Pandanus tectorius</i>) Naupaka (Beach) (<i>Scaevola taccada</i>)
1.2	Fence Entrance	A'ali'i (<i>Dodonea viscosa</i>) Ti Leaf (<i>Cordyline frtcosa</i>)
1.3	<p>Inside Fenced Garden:</p> <p>As seed is spread through the season, zones will transform and move</p> <p>(Aalii and hala scattered throughout this zone)</p>	<p>Ilima / Popolo Patch</p> <p>A'ali'i (<i>Dodonea viscosa</i>)</p> <p>A'ali'i (<i>Dodonea viscosa</i>)</p> <p>Ti Leaf (<i>Cordyline frtcosa</i>)</p>
		<p>Kukui Patch</p> <p>Kukui (<i>Aleurites moluccana</i>)</p>
		<p>Mulch and Olena</p> <p>Olena (<i>Curcuma longa</i>)</p>
		<p>Noni Patch</p> <p>A'ali'i (<i>Dodonea viscosa</i>)</p> <p>Noni (<i>Morinda citrifolia</i>)</p>
		<p>Ground Cover Zone</p> <p>To be decided (pohinahina? other laau ground cover)</p>
		<p>Uhaloa / Popolo Patch</p> <p>A'ali'i (<i>Dodonea viscosa</i>)</p> <p>Popolo (<i>Solanum americanum</i>)</p> <p>Uhaloa (<i>Waltheria indica</i>)</p>

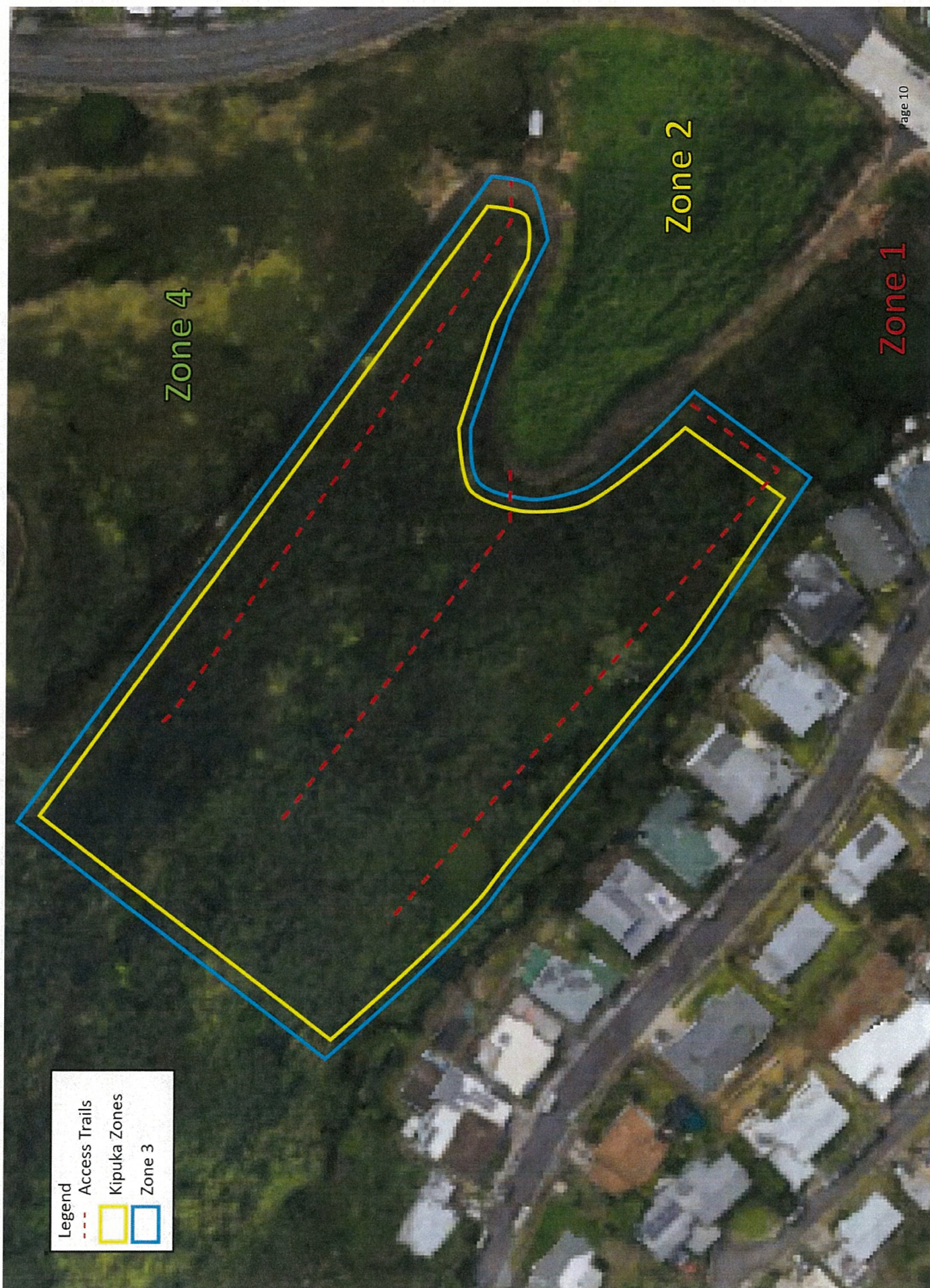
Zone 2 of Ala Mahamoe Cultural Forest



Zone 2 of Ala Mahamoe Cultural Forest

Kipuka #	Name	Species Composition
2.1	Interpretive Garden	Mixed variety: A'ali'i (Dodonea viscosa) Iliee (Plumbago zeylanica) Ilima (sida fallax) Hala (Pandanus tectorius) Koa (Acacia koa) Loulu (Pritchardia sp.) Pili Grass (Heteropogon) Popolo (Solanum americanum) Ti Leaf (Cordyline frtcosa) Uhaloa (Waltheria indica)
2.2	Roadsides / Ala Mahamoe Ave.	Alternate, ~5 feet apart from each planting Kamani (Calophyllum inophyllum) Kou (Cordia subcordata) Milo (Thespesia populnea)
2.3	Pili Plateau	Pili Grass (Heteropogon) Uhaloa (Waltheria indica)
2.4	Terrace Zone / Lānai kaupoko 'ole	Kou (Cordia subcordata) Milo (Thespesia populnea)
2.5	A'ali'i Flats	A'ali'i (Dodonea viscosa) Koa (Acacia Koa)
2.6	Wahi ho'omalū (shaded shelter) *tentative hale location	Kukui (Aleurites moluccana) Pili Grass (Heteropogon) Uhaloa (Waltheria indica)
2.7	Wiliwili Wonderland	Kamani (Calophyllum inophyllum) Kou (Cordia subcordata) Milo (Thespesia populnea) Wiliwili (Erythrina sandwichensis)
2.8	Hene Hill Mauka (Upper Sloped Hill)	A'ali'i (Dodonea viscosa) Koa (Acacia Koa)
2.9	Pale Zone 2 (Buffer)	Kukui (Aleurites moluccana) Kou (Cordia subcordata) Milo (Thespesia populnea)
2.10	Pale Zone 3 (Buffer)	A'ali'i (Dodonea viscosa) ? Kou (Cordia subcordata) Milo (Thespesia populnea)
2.11	Hene Hill Makai (Lower Sloped Hill)	A'ali'i (Dodonea viscosa) Koa (Acacia Koa)
2.12	Pale Zone 1 (Buffer)	Kukui (Aleurites moluccana) Kou (Cordia subcordata) Milo (Thespesia populnea)
2.13	Ala Mahamoe Trail	Current Fuel Break

Zone 3 of Ala Mahamoe Cultural Forest



Zone 4 and Zone 5 of Ala Mahamoe Cultural Forest



Zone 3-5 of Ala Mahamoe Cultural Forest: Kipuka Forest Planting

This zone is established with weed mat kipuka zones and the mixed dry forest tree plantings (approx. 5-10 plants depending on the size of the kipuka)

Kipuka zones constructed sizes depend on the terrain and biota in the area and what the field crew can complete.

In addition to kipuka zones, small gorilla planting will be utilized. Meaning no clearing will be completed, but robust tree species will be planted within weed areas, relying on the invasive canopy to provide shade and protection from ungulates until they have matured. (Note: gorilla planting should utilize GPS tracking to monitor plant growth)

Kipuka #	Name	Species Composition
1-30+	Kipuka Forest Zones	Mixed variety: A'ali'i (<i>Dodonea viscosa</i>) Alahe'e (<i>Psydrax odorata</i>) Hala (<i>Pandanus tectorius</i>) Koa (<i>Acacia koa</i>) Loulou (<i>Pritchardia</i> sp.) Milo (<i>Thespesia populnea</i>) Uhaloa (<i>Waltheria indica</i>)

Halau O Huluena Kio'ō Project

Halau O Huluena, under direction of Kahu Roddy Kamawaelualani Kawehi Akau of Moanalua and Lead builder, Isaiah Burch, are leading the efforts to create the vision and construct a traditional hale. Haumana numbering approximately 30 plus 'ohana will be part of the building process. Additional contribution / participation by Koolau Mountains Watershed Partnership (KMWP) staff plus 'ohana. Additional contribution by DLNR / DOFAW as pertains to trailer / flatbed usage for transporting materials.

Purpose: This hale will serve as a multi-generational classroom for Halau O Huluena programs, KMWP programs, comprising but not limited to cultural areas of lā'au lapa'au, oli, hula, cultural forestry, and watershed preservation. Hale will give new life to the ili, attracting more community, fostering the revival and preservation of the culture. This project component aims to connect kanaka to 'āina and ancient customs.

Construction components planned: Hale, size 10" width x 20" length x 12" height, made with traditional materials except cement wells.

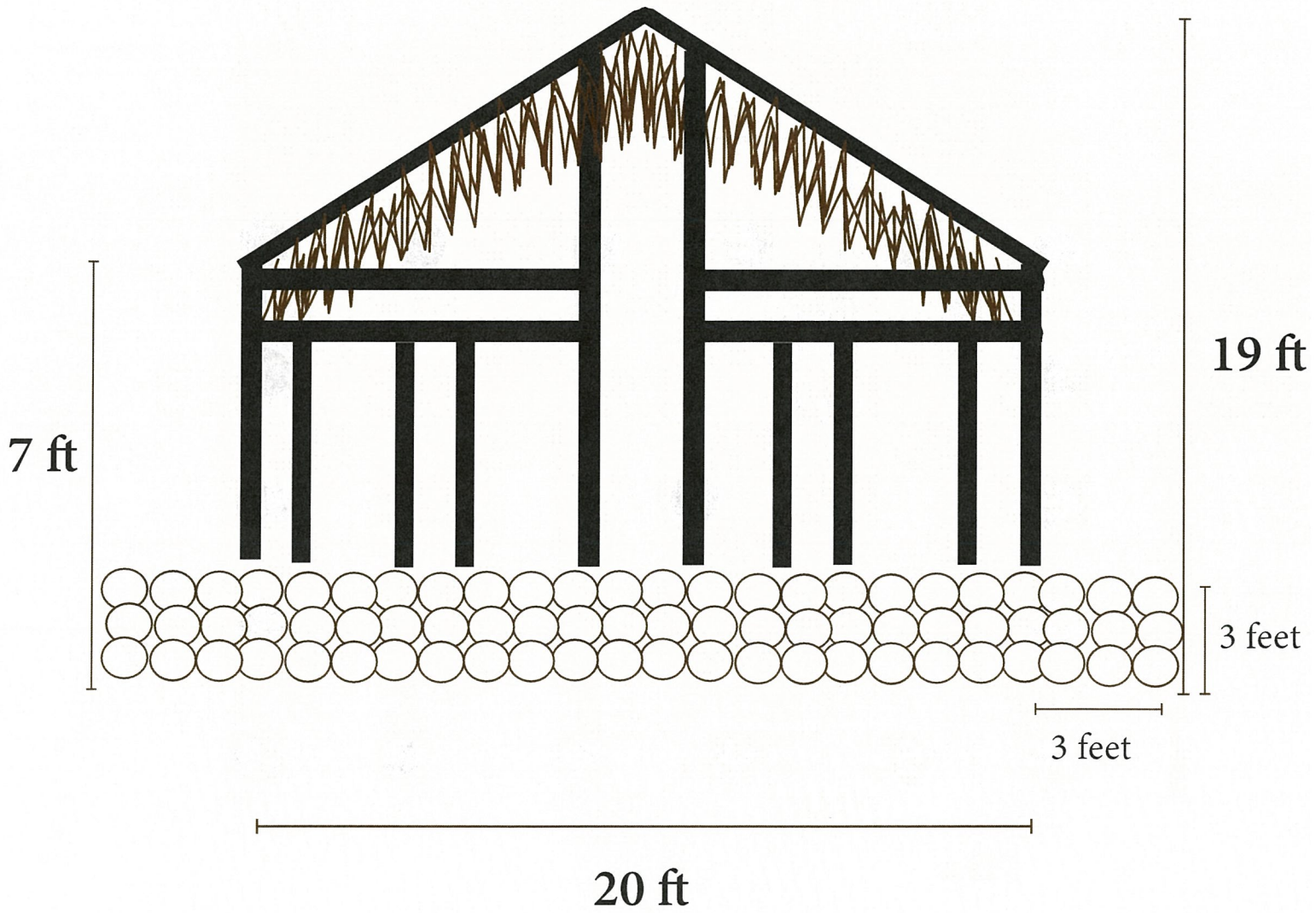
Timeline:

2020 - discussions with partners and community stakeholders, submit permit request to DOFAW

2021 - gather materials, prep the site (with permit approval)

2021 - 2022 - hale construction and completion, commence using areas with cultural protocols and continued community outreach and response

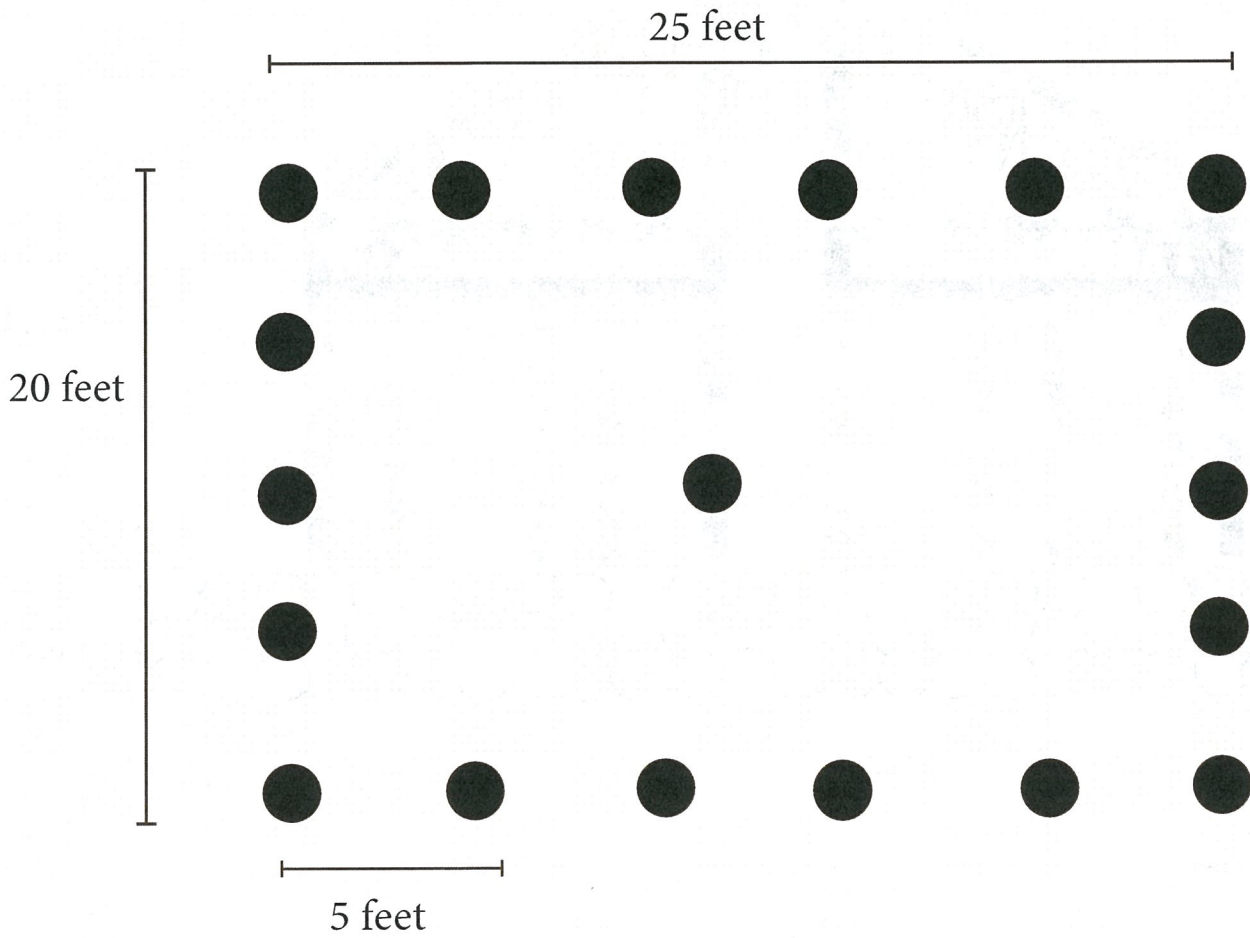
Hale Front View



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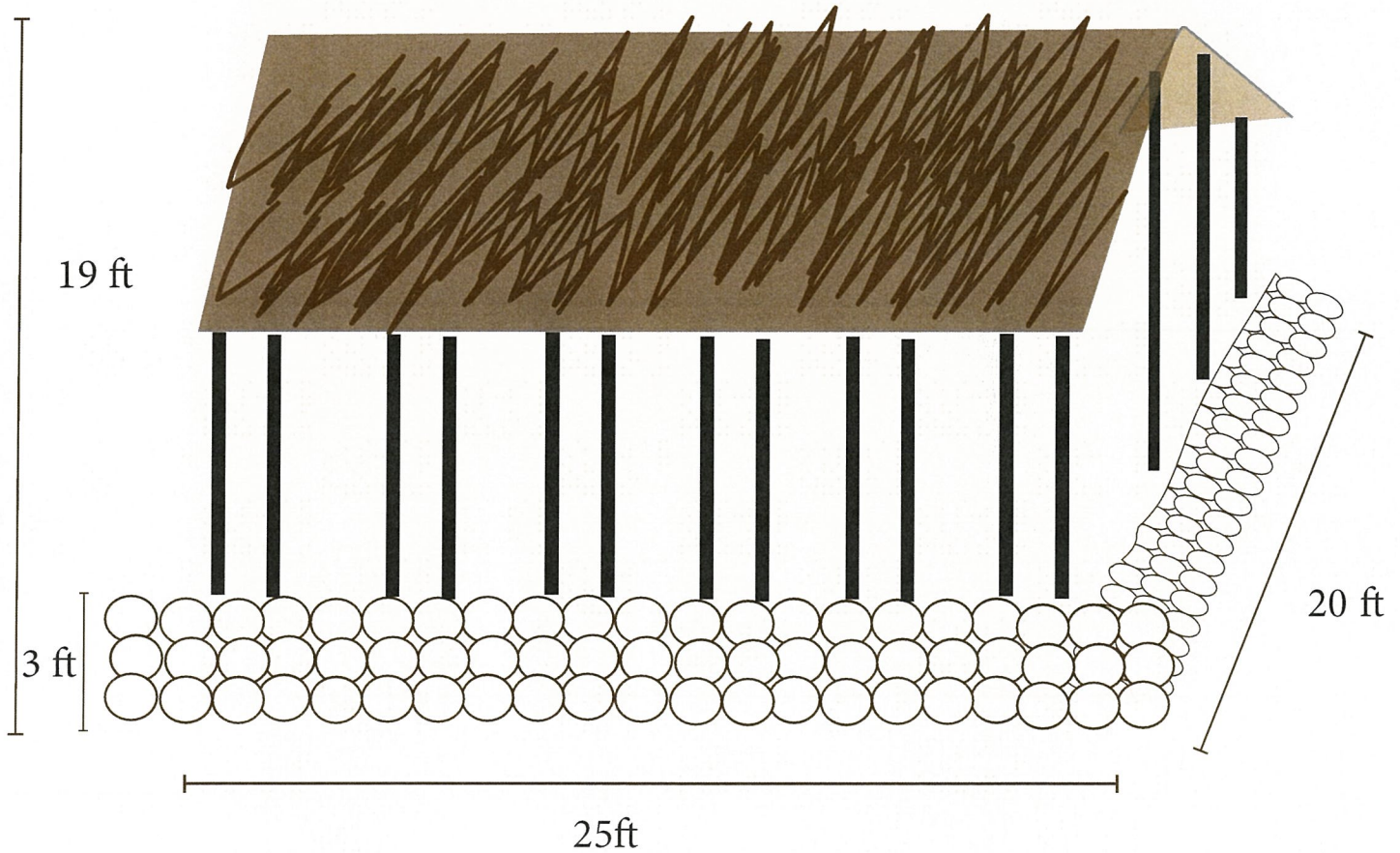
Floor Plan

● = post



not to scale

Side View



Signature:

Email: david.g.smith@hawaii.gov

not to scale

